Influence of Sea Surface Temperatures on the Diurnal Cycle of the North American Monsoon System

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Figures:

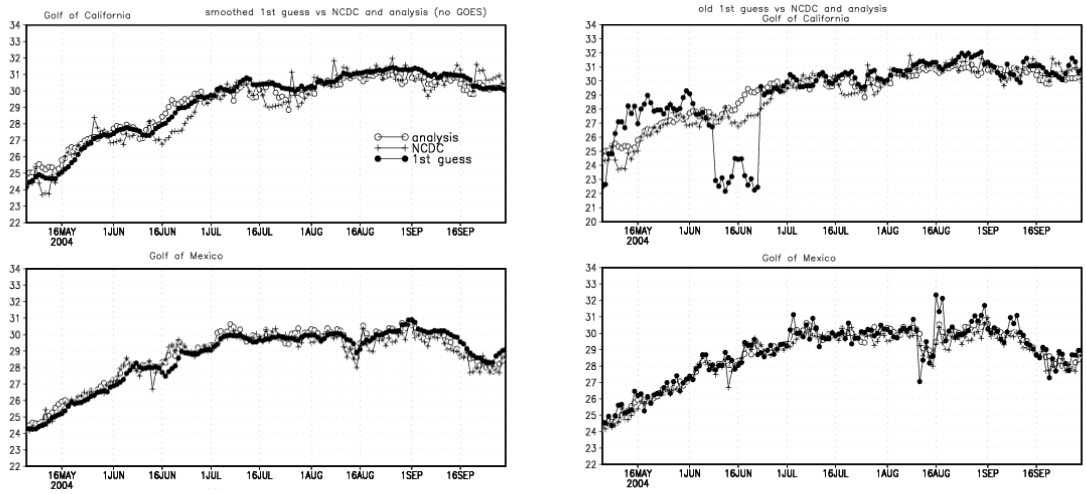

Fig. 1: Daily mean 1st guess in the new system (left) and in the old system (right). Solid circles: the 1st guess of daily mean used for quality control; open circles: previous analysis from Wang and Xie (2007); and pluses: analysis from the National Climate Data Center (NCDC).

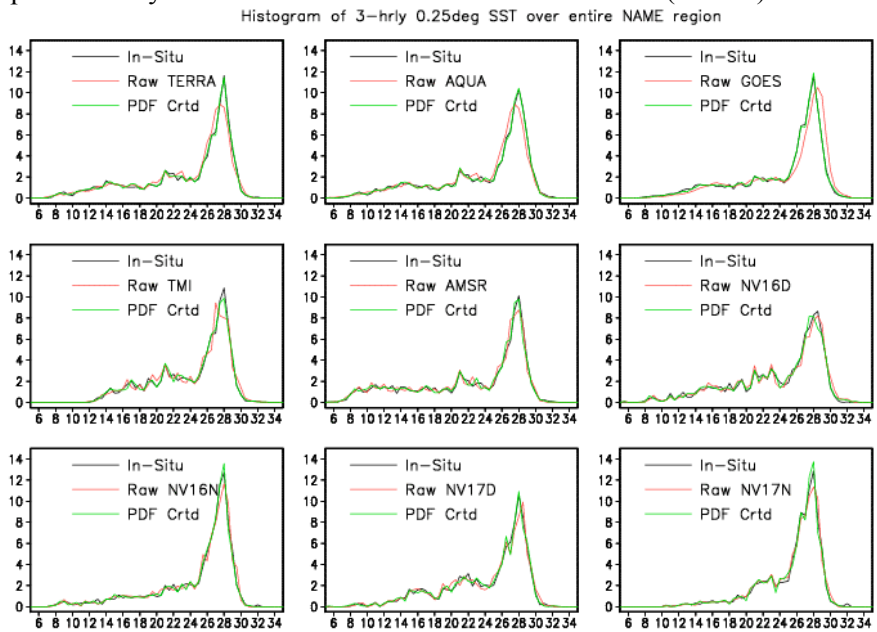

Fig. 2: PDF histogram in the new system based on testing data period in July 1 2004 to July 31 2004 over entire NAME region.

Table 1. RMS differences in daily mean between the analysis experiments and moored buoys (MBOUY) and diurnal amplitude (RMS of diurnal deviation from daily mean). The diurnal amplitude from moored buoys, which are not used in the analysis, is also given for comparison.

Satellites used in the analysis	RMS difference of daily mean (K)	Diurnal amplitude (K)
NOAA16	0.885	0.155
NOAA17	0.907	0.144
NOAA16+NOAA17	0.844	0.164
NOAA16+NOAA17+GOES	0.730	0.290
NOAA16+NOAA17+GOES+TMI+AMSR	0.698	0.317
NOAA16+NOAA17+GOES+TMI+AMSR+AQUA+TERRA	0.587	0.323
MBUOY		0.294